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09/726,277	11/30/2000	Theodore Hagelin	156P013	5290

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EXAMINER

WOO, RICHARD SUKYOON

ART UNIT	PAPER NUMBER
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3629

DATE MAILED: 06/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/726,277

Applicant(s)

HAGELIN, THEODORE

Examiner

Richard Woo

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MW

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 101

- 1) 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

- 2) Claims 1-21 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

As an initial matter, the United States Constitution under Art. I, §8, cl. 8 gave Congress the power to "[p]romote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries". In carrying out this power, Congress authorized under 35 U.S.C. §101 a grant of a patent to "[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition or matter, or any new and useful improvement thereof." Therefore, a fundamental premise is that a patent is a statutorily created vehicle for Congress to confer an exclusive right to the inventors for "inventions" that promote the progress of "science and the useful arts". The phrase "technological arts" has been created and used by the courts to offer another view of the term "useful arts". See *In re Musgrave*, 167 USPQ (BNA) 280 (CCPA 1970). Hence, the first test of whether an invention is eligible for a patent is to determine if the invention is within the "technological arts".

Further, despite the express language of §101, several judicially created exceptions have been established to exclude certain subject matter as being patentable subject matter covered by §101. These exceptions include "laws of nature", "natural

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phenomena", and "abstract ideas". See *Diamond v. Diehr*, 450, U.S. 175, 185, 209 USPQ (BNA) 1, 7 (1981). However, courts have found that even if an invention incorporates abstract ideas, such as mathematical algorithms, the invention may nevertheless be statutory subject matter if the invention as a whole produces a "useful, concrete and tangible result." See *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* 149 F.3d 1368, 1973, 47 USPQ2d (BNA) 1596 (Fed. Cir. 1998).

This "two prong" test was evident when the Court of Customs and Patent Appeals (CCPA) decided an appeal from the Board of Patent Appeals and Interferences (BPAI). See *In re Toma*, 197 USPQ (BNA) 852 (CCPA 1978). In *Toma*, the court held that the recited mathematical algorithm did not render the claim as a whole non-statutory using the Freeman-Walter-Abele test as applied to *Gottschalk v. Benson*, 409 U.S. 63, 175 USPQ (BNA) 673 (1972). Additionally, the court decided separately on the issue of the "technological arts". The court developed a "technological arts" analysis:

The "technological" or "useful" arts inquiry must focus on whether the claimed subject matter...is statutory, not on whether the product of the claimed subject matter...is statutory, not on whether the prior art which the claimed subject matter purports to replace...is statutory, and not on whether the claimed subject matter is presently perceived to be an improvement over the prior art, e.g., whether it "enhances" the operation of a machine. *In re Toma* at 857.

In *Toma*, the claimed invention was a computer program for translating a source human language (e.g., Russian) into a target human language (e.g., English). The court found that the claimed computer implemented process was within the "technological art"

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because the claimed invention was an operation being performed by a computer within a computer.

The decision in *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* never addressed this prong of the test. In *State Street Bank & Trust Co.*, the court found that the "mathematical exception" using the Freeman-Walter-Abele test has little, if any, application to determining the presence of statutory subject matter but rather, statutory subject matter should be based on whether the operation produces a "useful, concrete and tangible result". See *State Street Bank & Trust Co.* at 1374. Furthermore, the court found that there was no "business method exception" since the court decisions that purported to create such exceptions were based on novelty or lack of enablement issues and not on statutory grounds. Therefore, the court held that "[w]hether the patent's claims are too broad to be patentable is not to be judged under §101, but rather under §§102, 103 and 112." See *State Street Bank & Trust Co.* at 1377. Both of these analysis goes towards whether the claimed invention is non-statutory because of the presence of an abstract idea. Indeed, *State Street* abolished the Freeman-Walter-Abele test used in *Toma*. However, *State Street* never addressed the second part of the analysis, i.e., the "technological arts" test established in *Toma* because the invention in *State Street* (i.e., a computerized system for determining the year-end income, expense, and capital gain or loss for the portfolio) was already determined to be within the technological arts under the *Toma* test. This dichotomy has been recently acknowledged by the Board of Patent Appeals and Interferences (BPAI) in affirming a

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§101 rejection finding the claimed invention to be non-statutory. See *Ex parte Bowman*, 61 USPQ2d (BNA) 1669 (BdPatApp&Int 2001).

In the present application, there is no significant claim recitation of the data processing system or calculating computer.

Claim Rejections - 35 USC § 112

3) Claims 3-4, 6, 9-14, 17-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In Claim 3, line 4; and Claim 4, line 5, respectively, the recitation of "the marketplace" lacks antecedent basis.

In Claim 6, lines 7 and 10, the recitation of "said tangible asset" lacks antecedent basis.

In Claim 9, line 3, the recitation of "the licensor" lacks antecedent basis.

In Claim 12, line 1; Claim 21, line 1, respectively, the recitation of "new" renders the claim indefinite because it is a subject term and is not clear how to define something is "new" (e.g. less than 1 day, 1 month, or 1 year?).

In Claim 14, line 6, the recitation of "said average product" lacks antecedent basis.

In Claim 17, lines 7-8, the whole calculating step renders the claim indefinite because it is not clear which one is divided by which or what minus what.

In Claim 18, line 12, the recitation of "the marketplace" lacks antecedent basis.

In Claim 18, line 14, the recitation of "said competitive advantage" lacks antecedent basis.

In Claim 19, line 5, the recitation of "said tangible asset" lacks antecedent basis.

In Claim 20, line 4, the recitation of "said licensee" lacks antecedent basis.

In Claim 21, line 15, the recitation of "said average product" lacks antecedent basis.

It is noted that the claim(s) are narrative in form and replete with indefinite and functional or operational language. The structure which goes to make up the device must be clearly and positively specified. The structure must be organized and correlated in such a manner as to present a complete operative device. Note the format of the claims in the patent(s) cited.

Claim Objections

- 4) Claim 20 is objected to because of the following informalities:

In Claim 20, line 3, "a" should be changed to --an-- before "increase".

Appropriate correction is required.

Claim Rejections - 35 USC § 102

- 5) The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

6) Claims 1, 3, 5, 7-8, 12 and 15-16, as long as Claims 3 and 12 are definite, are rejected under 35 U.S.C. 102(a) as being anticipated by 2002/0046038 (Prokoski).

As for Claim 1, Prokoski discloses a method comprising the steps of:

calculating a monetary value of a tangible asset associated with the intangible asset (see paragraphs [0038], [0040] – [0048]; see Figs. 1-4);

determining a competitive advantage of the tangible asset over competing tangible assets as a percentage thereof (para. [0042]); and

calculating a value for the intangible asset based upon a relative contribution of the intangible asset to the competitive advantage of the tangible asset (see Supra paragraphs).

As for Claim 3, Prokoski further discloses the method, wherein the step of determining a competitive advantage includes the steps of:

identifying at least one parameter associated with the tangible asset relevant to commercial success in the marketplace (see paragraphs [0038], [0040] – [0048]; see Figs. 1-4); and

comparing the parameter with at least one parameter of at least one competing tangible asset to determining the competitive advantage of the tangible asset as a percent variation.

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As for Claim 5, Prokoski discloses a method comprising the steps of:

determining a present monetary value of an intended market for the pre-market product;

calculating a competitive advantage of the pre-market product in the intended market as a percent variation;

predicting a market share of the pre-market product based on the competitive advantage; and

calculating a monetary value for the pre-market product by multiplying the predicted market share and the present monetary value of the intended market (see Supra paragraphs and Figs.).

As for Claim 7, Prokoski further discloses the method including the steps of:

comparing a plurality of parameters of the pre-market product to a plurality of corresponding parameters of competing products in the intended market to determine competitive advantage for each parameter of the pre-market product as a percent variation; and

weighing and averaging the competitive advantage of the parameters to determine the competitive advantage of the pre-market product in the market (see Supra paragraphs and Figs.).

As for Claim 8, Prokoski further discloses the method including the steps of:

determining an average market share of the market; and

multiplying the average market share by the competitive advantage (see *Id.*).

As for Claim 12, Prokoski discloses a method comprising the steps of:

calculating a change in a competitive advantage of a tangible asset associated with the intangible asset as a percent variation; and

calculating the monetary value by multiplying the change in the competitive advantage of the tangible asset and an average market share in an intended market (see *Supra* paragraphs and Figs.).

As for Claim 15, Prokoski discloses a method comprising the steps of:

determining a competitive advantage as a percent variation of the tangible asset in an intended market;

determining an average market share as a percent of the market; and

multiplying the average market share and the competitive advantage (see *Supra*).

As for Claim 16, Prokoski discloses a method comprising the steps of:

calculating a monetary value of the tangible asset;

calculating an amount of firm expenditures on research and development, advertising, and business innovation as a percentage of total firm expenditures; and

multiplying each percent of firm expenditures with the monetary value of the tangible asset (see paragraphs [0038], [0040] – [0048]; see Figs. 1-4).

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7) Claims 9, 11 and 17 are rejected under 35 U.S.C. 102(a) as being anticipated by WO 01/93154 (hereinafter "Exchange").

As for Claim 9, Exchange discloses a method comprising the steps of:

determining a monetary value to a licensor and licensee based on a change in monetary value of a tangible asset associated with an intangible asset subject to the license (see Figs. 5A-16B, 18E-19 and the descriptions thereof); and

calculating the monetary value to the licensor and licensee by comparing the change in monetary value.

As for Claim 11, Exchange further disclose the method, wherein the step of calculating includes the steps of:

calculating a net monetary value by subtracting a minimum monetary value to the licensor from a maximum monetary value to the licensee;

determining an equal return payment that provides an equal return on investment to the licensor and licensee;

calculating the monetary value to the licensor as the equal return payment; and

calculating the monetary value to the licensee by subtracting the equal return payment from the net value (see Figs. 5A-16B, 18E-19 and the descriptions thereof).

As for Claim 17, Exchange discloses a method comprising the steps of:

calculating a minimum value of the license to the licensor;

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calculating a maximum value of the license to the licensee;
calculating a net value by subtracting the minimum value from the maximum value;
determining the licensor investment in the subject of the license; and
calculating the license payment as an amount which when the amount is divided by the licensor investment equals the net value minus the payment divided the payment (see Figs. 5A-16B, 18E-19 and the descriptions thereof).

Claim Rejections - 35 USC § 103

8) Claims 2, 4, 6, and 13-14, as far as Claims 4, 6 and 13-14 are definite, are rejected under 35 U.S.C. 103(a) as being unpatentable over Prokoski.

Prokoski discloses the invention as recited earlier but does not disclose expressly the limitations in Claims 2, 4, 6, and 13-14 as follows:

As for Claim 2:

determining a total annual gross sales in a market for the tangible asset (see paragraphs;
determining an annual percent growth of the market;
determining a life cycle in years of the tangible asset;
determining a profit margin of the tangible asset as a percent of gross sales;
determining a present value discount factor; and

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summing a multiple of the total annual gross sales, the annual percent growth, the profit margin, and the present value discount factor over each of the life cycle of the tangible asset.

As for Claim 4:

identifying a parameter dependent on the intangible asset and associated with the tangible asset that is relevant to commercial success in the marketplace;

calculating the relative contribution of the intangible asset to the competitive advantage of the tangible asset based on a contribution of the parameter to the competitive advantage of the tangible asset as compared to related intangible assets; and

multiplying the relative contribution of the intangible asset with the value of the tangible asset.

As for Claim 6:

determining a total annual gross sales in the intended market for the pre-market product;

determining an annual percent growth of the market as a percent;

determining a life cycle in years of the pre-market product;

determining a profit margin of the pre-market product as a percent of gross sales;

determining a present value discount factor; and

summing a multiple of the total annual gross sales, the annual percent growth, the profit margin, and the present value discount factor over each of the life cycle of the pre-market product.

As for Claim 13:

identifying at least one parameter associated with the tangible asset relevant to commercial success in the marketplace; and

comparing the parameter with at least one parameter of at least one competing tangible asset to determining the competitive advantage of the tangible asset as a percent variation;

calculating a competitive advantage for the tangible asset without the intangible asset as a percent variation;

calculating a competitive advantage for the tangible asset with the intangible asset as a percent variation; and

subtracting the competitive advantage for the tangible without the intangible asset from the competitive advantage for the tangible with the intangible asset.

As for Claim 14:

calculating a present monetary value of the intended market for the tangible asset;

calculating the average market share in the intended market as a percent;

determining the average present monetary value by multiplying the present monetary value of the intended market by the average market share; and
multiplying the average present monetary value and the changes in the competitive advantage.

At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to modify the valuation method of Prokoski such that includes the method steps of Claims 2, 4, 6, and 13-14 because Applicant has not disclosed that the claimed limitations (in Claims 2, 4, 6, and 13-14) provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with Prokoski because Prokoski discloses the invention for the valuation of intellectual property and financing of its development and exploitation.

Therefore, it would have been an obvious matter of design choice to modify Prokoski to obtain the invention as specified in claims.

9) Claim 10, as far as it is definite, is rejected under 35 U.S.C. 103(a) as being unpatentable over Exchange.

Exchange discloses the invention as recited earlier but does not disclose expressly the limitations in Claim 10 as follows:

As for Claim 10:

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calculating an increase in a competitive advantage of the tangible asset as a percent variation due to intangible asset subject to the license for the licensee;

calculating a decrease in a competitive advantage of the tangible asset as a percent variation due to the intangible asset subject to the license for the licensor;

determining a monetary value of the tangible asset by multiplying a monetary value for a market for the tangible asset and an average percent market share in the market;

determining a minimum monetary value to the licensor by multiplying the percent decrease by the monetary value of the tangible asset; and

determining a maximum monetary value to the licensee by multiplying the percent increase by the monetary value of the tangible asset.

At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to modify the valuation method of Exchange such that includes the method steps of Claim 10 because Applicant has not disclosed that the claimed limitations provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with Exchange because Exchange discloses the invention providing an online patent and license exchange which enables potential licensors and licensees of intangible assets to efficiently and reliably transact IP license or assignment agreements.

Therefore, it would have been an obvious matter of design choice to modify Exchange to obtain the invention as specified in claims.

Conclusion

10) The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 2001/0034695 is cited to show a method and system for facilitating tangible valuation of IP assets. The methods includes providing a centralized IP market accessible to others in which one or more financial instruments may be exchanged in one or more transactions for a tangible value.

US 6,330,547 is cited to show a method and apparatus for deciding whether to make a loan using an tangible asset as collateral and for making such a loan more attractive to a lender.

US 6,615,195 is cited to show a method and system to value knowledge-based property. Intangible property may be valued by analyzing stored data representing accesses by users to a medium containing a copy of the property, estimating a pattern of the accesses by users to the medium using a statistical model, and assigning a value to the property based on the pattern.

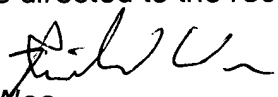
US 6,556,992 is cited to show a method and system for independently assessing the relative breadth, defensibility and commercial relevance of the patent assets and other intangible IP assets.

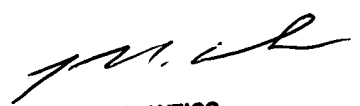
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Woo whose telephone number is 703-308-7830. The examiner can normally be reached on Monday-Friday from 8:30 AM -5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Weiss can be reached on 703-308-2702. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0861.


Richard Woo
Patent Examiner
GAU 3629
June 12, 2004


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